

REMARKS

In response to the Final Office Action mailed October 7, 2005, Applicants respectfully request reconsideration. To further prosecution of this application, each of the issues raised in the Final Office Action is addressed herein.

Claims 2 to 35 are pending in this application, of which claims 2, 12, 23, 33, and 35 are independent claims. By this amendment, Applicants have amended the specification and the drawings to add an additional figure, Figure 4. No new matter has been added by these amendments, as the features shown in new Figure 4 are completely supported by the application as originally filed. Applicants also have amended claim 34 to correct a minor informality, as noted by the Examiner. The application is now believed to be in allowable condition.

A. Rejections under 35 U.S.C. §102(b)

On page 3 of the Final Office Action, claims 2-22 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Cochran et al. (U.S. Patent No. 5,365,084). Applicants respectfully traverse these rejections.

1. Rejection of Independent Claim 2

Applicants' independent claim 2 is directed to a machine vision system that includes an addressable lighting system. On page 2 of the Final Office Action, the Examiner contends that Cochran discloses a machine vision system that includes an addressable lighting system. Applicants disagree. The Examiner stated, in relevant part, that the

PATENTS
Serial No.: 10/664,415
Confirmation No.: 3198
Attorney Docket No. CKB-079.02

lighting system in Cochran is addressable because “it is coupled to a processor (94,D) and adapted to receive data signals (first command signals) from the processor.” The term addressability, however, as recited in Applicants’ claims and as clearly employed in Applicants’ specification, describes a device’s ability to distinguish commands specifically intended for it, as transmitted via a common communication medium together with other information (e.g., other commands) intended for other devices (See Applicants’ specification page 9, paragraph 2). With respect to the “other information” recited in claim 2, this “other information” may include any information provided by the processor including, but not limited to, data received from, or control signals pertaining to, any peripherals attached to the machine vision system such as cameras, assembly systems, lighting systems or other devices.

Cochran fails to disclose the addressable lighting system of claim 2 because each device described in Cochran clearly is connected to a processor through its own dedicated communication medium, as illustrated in Cochran’s Figures 1 and 5. In particular, Cochran describes connecting camera devices associated with a machine vision system to a processor by a video signal line 60 (Cochran at Column 8, Line 28). This video signal line 60 is shown in the associated figure, Cochran’s Figure 1, to be a separate line from the connections 22 that control the lighting system. Thus, Figure 1, as well as Figure 5, plainly show that each device associated with Cochran’s machine vision system is connected to the processor by its own dedicated line.

Further, when Cochran describes controlling LEDs, it describes connecting either each LED directly to the processor on its own dedicated line or grouping a bank of LEDs together and connecting that bank to the processor on one shared line (Cochran at Column 12, Line 20). Cochran then states that the individually connected LED light sources provide more customizable lighting than the banked LEDs (Cochran at Column 12, Line 27). Accordingly, these banked LEDs must not be addressable because a bank of addressable LEDs arguably could create equally customizable lighting.

Finally, where Cochran describes using different types of light generators in separate lighting arrays, it describes controlling these light sources from a power supply junction box, which by definition would separate power into different, distinct power lines. Furthermore, Cochran's Figure 12 illustrates a separate control line for each array of light generators (Cochran at Column 14, Line 10). Therefore, Cochran clearly describes each light source being connected to the processor by its own exclusive communication medium. As a result, it is no surprise that Cochran is *completely silent* with respect to the concept of addressability.

In stark contrast, at least one embodiment of Applicants' invention allows for an addressable lighting system to share a communication medium with another device (e.g., another addressable lighting system), as shown in Applicants' Figure 4. Figure 4 shows two lighting systems, 114A and 114B attached to the processor 104 by one communication medium. At least one of these lighting systems is capable of distinguishing control signals sent via this medium that are meant to control it from control signals sent via this medium

that are not meant to control it (and may be meant to control the other lighting system or some other device).

In view of the foregoing, Applicants' claim 2, by reciting an addressable first lighting system, patentably distinguishes over Cochran and is in condition for allowance. Therefore, the rejection of independent claim 2 under 35 U.S.C. §102(b) should be withdrawn. Claims 3-11 depend from claim 2 and hence are allowable based at least upon their dependency.

2. Rejection of Independent Claim 12

Applicants' claim 12 is directed to a method of illuminating an object for use with a machine vision system that includes illuminating the object in accordance with at least one addressed command signal. On page 2 of the Final Office Action, the Examiner contends that Cochran discloses a method of illuminating an object using an addressed command signal. Applicants disagree. As discussed above, Cochran does not mention using addressed control signals; instead, each device described in Cochran is connected to the processor through its own dedicated communication medium. Hence, there is absolutely no teaching or suggestion in Cochran that addressed command signals should be used.

In view of the foregoing, Applicants' claim 12, by reciting the use of an addressed command signal, patentably distinguishes over Cochran and is in condition for allowance. Therefore, the rejection of independent claim 12 under 35 U.S.C. §102(b) should be withdrawn. Claims 13-22 depend from claim 12 and hence are allowable based at least upon their dependency.

PATENTS
Serial No.: 10/664,415
Confirmation No.: 3198
Attorney Docket No. CKB-079.02

B. Conclusion

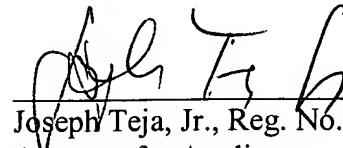
In is respectfully believed that all of the rejections, objections, or comments set forth in the Final Office Action have been addressed. However, the absence of a reply to a specific rejection, objection, or comment set for the in the Final Office Action does not signify agreement with or concession of that rejection, objection, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Furthermore, nothing in this paper should be construed as an intent to concede any issue with regard to any claim.

In view of the foregoing remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes after this amendment that the application is not in condition for allowance, the Examiner is requested to call the Applicants' representative at the telephone number indicated below to discuss any outstanding issues relating to the allowability of the application.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 06-1448, reference CKB-079.02.

PATENTS
Serial No.: 10/664,415
Confirmation No.: 3198
Attorney Docket No. CKB-079.02

Respectfully submitted,



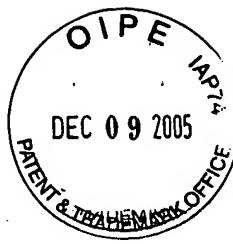
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PATENTS
Serial No.: 10/664,415
Confirmation No.: 3198
Attorney Docket No. CKB-079.02

IN THE DRAWINGS:

Please amend Figures 1, 2, and 3 and add Figure 4 as indicated in red on the attached annotated sheets. Clean replacement copies of all figures are also included on the attached replacement sheets.



USSN: 10/664,415
Inventors: Dowling, et al.
For: Systems and Methods for Providing...
ANNOTATED SHEET

1/4

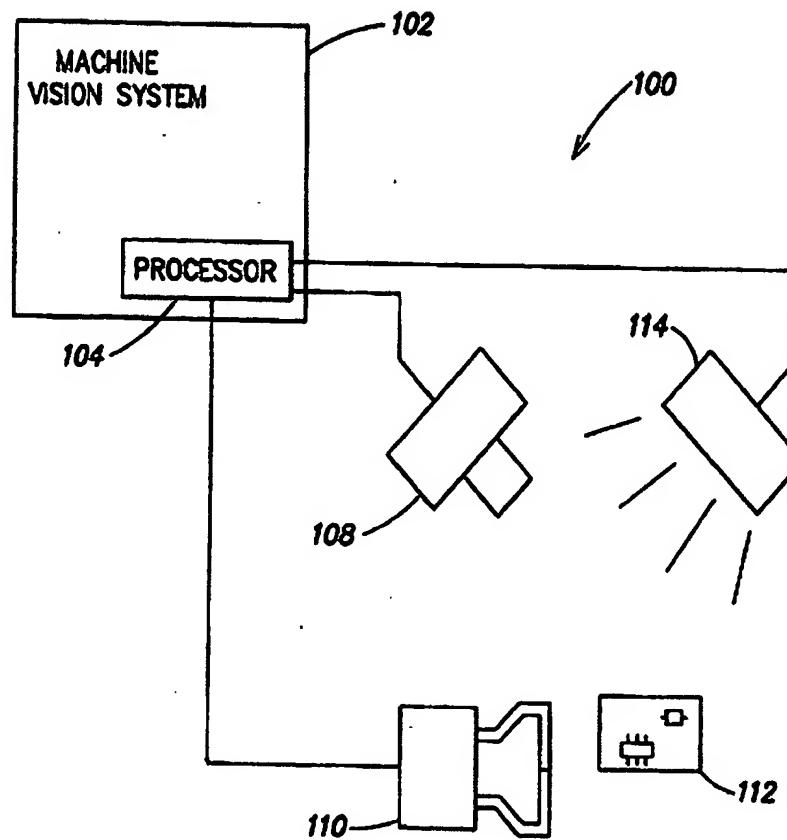


FIG. 1

2/4

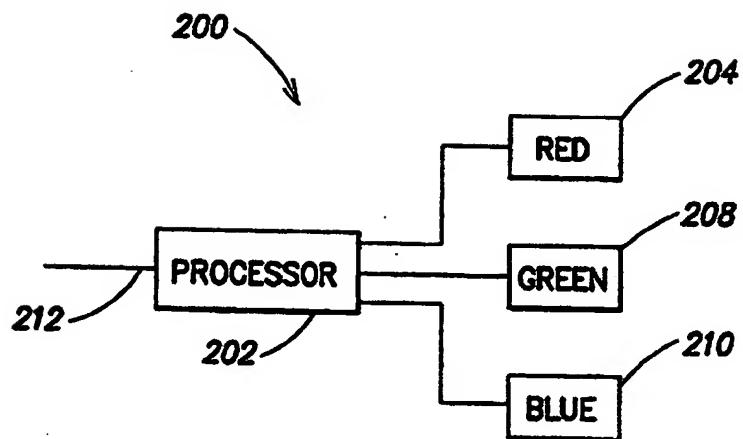


FIG. 2

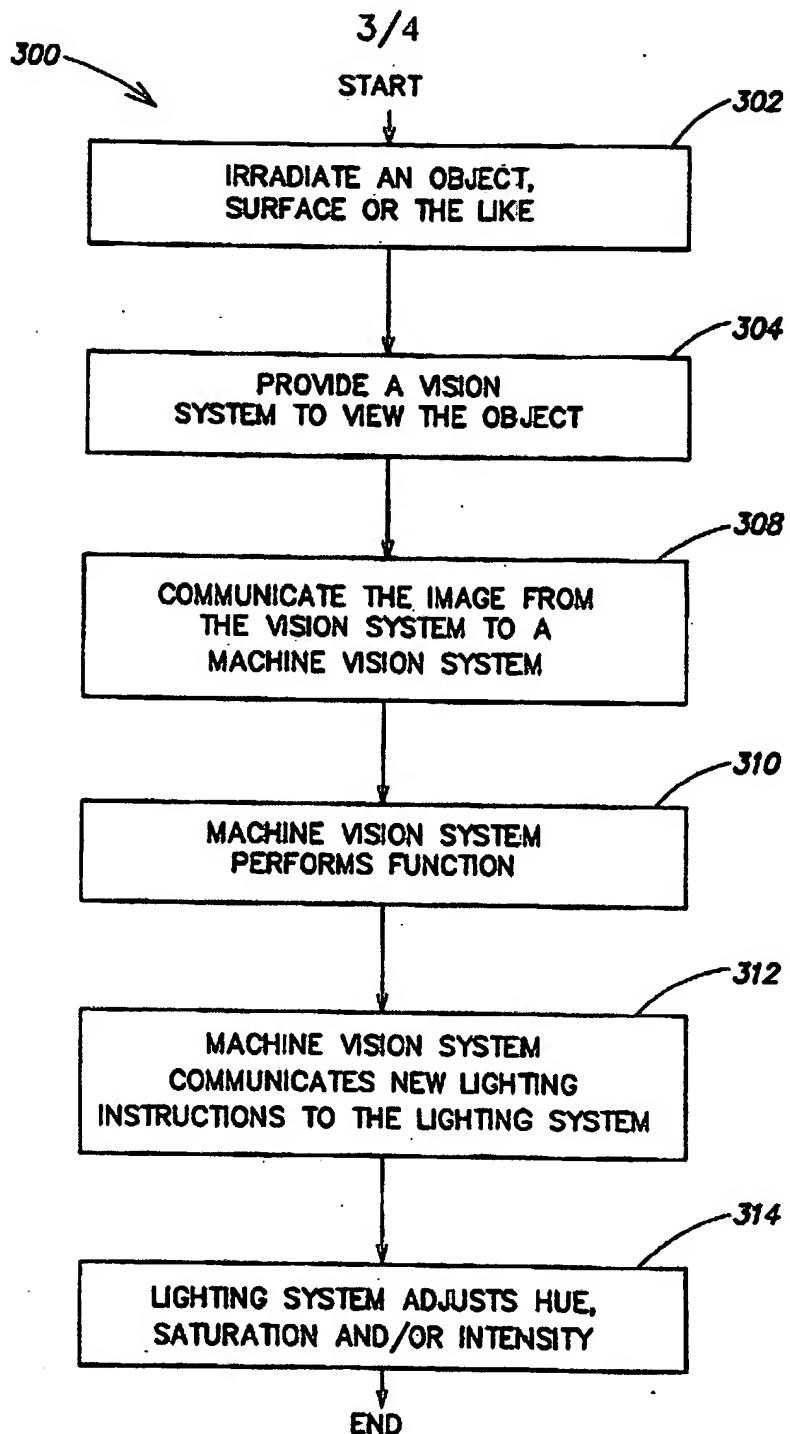


FIG. 3

4/4

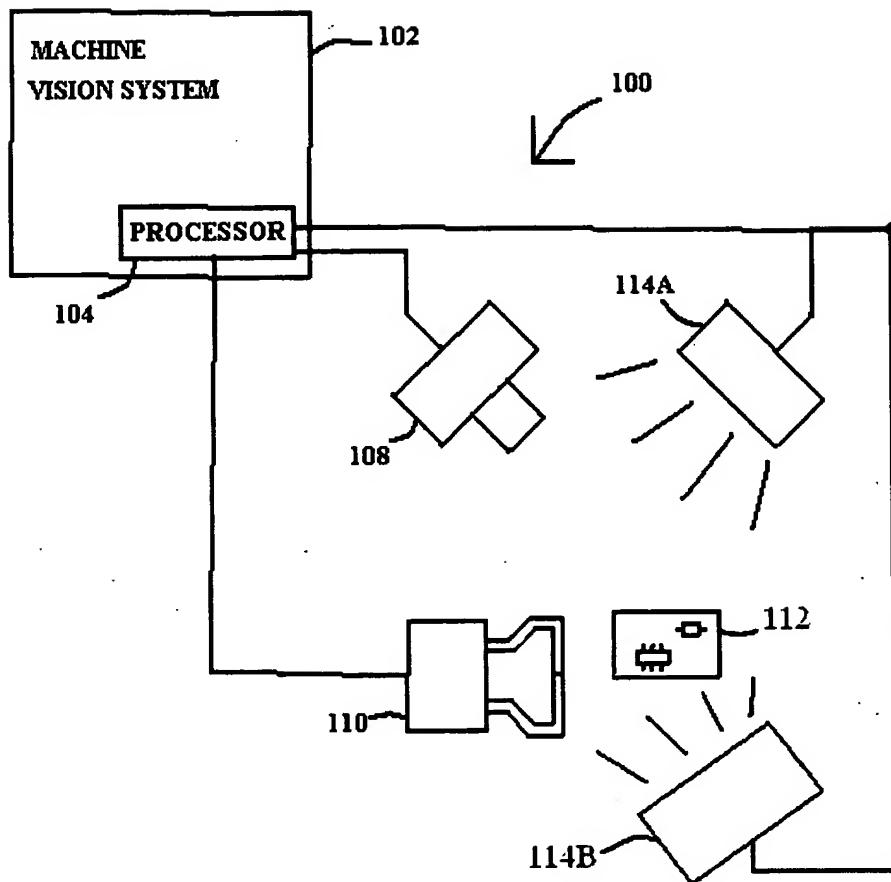


FIG. 4